Sauget Area 2 Site
05XY BD 00

Nabil Fayoumi
07/10/2003 08 29 AM

To "Vandiver, Gary W" <gwvand@solutia com>
Subject Re American Bottoms - Site R Startup Schedule and Slurry Wall Construction Schedule

Hi Gary,

Following you will find a few issues related to the American Bottom's Letter, and the Slurry Wall Construction Schedule

American Bottoms Letter

In the U S EPA's February 4, 2003, Conditional Approval Letter of the RA/RD Workplan, Solutia was informed that the completion of the project should not be contingent on the ability of Solutia to treat the extracted groundwater at the American Bottoms POTW Alternative disposal options were to be investigated by Solutia

For months now Solutia has been communicating to the U S EPA that American Bottoms will accept and treat groundwater from Site R Furthermore, Solutia agreed to install the groundwater extraction and disposal system by the middle of July 2003, and to extract double the volume of groundwater in order to establish hydraulic control on site in the absence of the physical barrier

Up until Tuesday 7/8/03 (one week before startup), Solutia had failed to mention to the U S EPA the American Bottoms is requesting 180 days acclimation period In addition, Solutia has not shared with the U S EPA data that was sent to American Bottoms (Preliminary Technical Assessment of Pretreatment Local Discharge Limitations Report and Carbon Columns Data collected on May 19 to 29, 2003)

American Bottom's letter also states that *"Should the data support a more rapid startup, the process will be adjusted accordingly, Like wise, should it appear that there is process inhibition, particularly to the nitrification process, or that plant effluent or water quality standards might be in jeopardy, the Site R discharge may remain as is or be reduced"* Solutia should submit a contingency Plan in the case that American Bottoms can not accept extracted groundwater and/or volume This contingency Plan is due within 21 days from the receipt of this e-mail In addition please provide a time table, by which a hydraulic control will be established based on the American Bottom's Letter

On one hand we have extraction wells that are capable of pumping double the groundwater volume in the absence of the wall barrier, and on the other hand American Bottoms is requesting 180 days for acclimation period Worse yet, there is a chance that American Bottom, once data is available, may reduce the discharge rate from Site R

Solutia has made progress by installing the extraction and monitoring systems The Agency understands that a reasonable shake down/acclimation period is needed and appropriate The U S EPA would like to provide any assistance and support needed to keep this project moving Please let me know how I can help

Slurry Wall Construction Schedule

As discussed on the conf call last Tuesday, the weather should not effect the slurry wall construction schedule Construction can be completed by the end of this fiscal year (please see attached files) If Solutia agrees to this schedule, then we can change the ESD to say that the construction of the slurry wall will be completed approximately six months after the expected completion date for the jet grout wall (July 16, 2003) If you have any questions with this e-mail please call

[redacted]

Production Estimate Rev 1 030708

Thanks
Nabil

Nabil Fayoumi
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07/08/2003 01 17 PM

To "Williams, Richard S", "Yare, Bruce S", Nabil Fayoumi, Peter Barrett, EPA4.
Subject American Bottoms - Site R Startup Schedule

Nabil,

Attached is a letter from American Bottoms Regional Wastewater Treatment Facility (ABRWTF) with the schedule of groundwater volumes which ABRWTF is willing to accept from Site R

Regards,

Gary

Gary Vandiver
Solutia Inc
PO Box 66760
St Louis, MO 63166-6760

(314) 674-6768 Site R Startup Schedule dc

Target Area 2 Site, ILL
05XXBD00

"Vandiver, Gary W" <gwvand@solutia.com >

07/08/2003 01:17 PM

To: "Williams, Richard S", "Yare, Bruce S", Nabil Fayoumi, Peter.Barrett, EPA4;
Subject: American Bottoms - Site R Startup Schedule

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Regards,

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(314) 674-6768 Site R Startup Schedule.dc

DRAFT 3

July 1, 2003

Mr. Richard S. Williams
Project Manager
Sauget Sites Project
Solutia, Inc.
500 Monsanto Avenue
Sauget, IL 62206-1198

RE: Site R Startup

Dear Richard:

As requested, a preliminary startup schedule for the treatment of groundwater from Solutia's Site R at the P-Chem and American Bottoms Treatment Plants is presented.

Rather than listing the many "caveats" associated with the startup that have been incorporated into the Site R discharge permit, the startup concept and philosophy will be presented. With the exception of the initial Site R discharge rate, the concept is to control the Site R discharge flow rate and/or mass discharges of specific containments based on contemporary data from samples collected at Site R, P-Chem Influent and Effluent, and American Bottoms Plant Effluent, along with other process data.

Obviously the most sensitive and critical operation is the secondary treatment process. This process is a modified

activated sludge process using a 20-day mean cell residence time (MCRT) and having the capability to add powdered activated carbon (PAC) to the process. Currently, PAC is not being added. Nitrification and denitrification are part of the modified process.

Based upon a review of the data presented in the report, "Preliminary Technical Assessment of Pretreatment Local Discharge Limitations: Site R", by Anderson and Kathrinus, and upon data collected during testing of carbon columns at Site R on May 19 to 29, 2003, the initial discharge from Site R will be 100,000 gallons per day. At this discharge rate, there should be no exceedences of either an effluent or water quality limitation even if the contaminants passed through the secondary treatment process untreated.

In general, American Bottoms would consider increasing the Site R discharge after one MCRT (20 days) and after sufficient data is available for review. At that point, any adjustment of the Site R discharge (up, down or remain as is) will be based on available data, operating experience, and engineering judgment.

All of the known contaminants of concern are biodegradable to some extent depending upon contaminant concentration, other

potential process interference, and biomass acclimation. Assuming there are no contaminants present at inhibitory concentrations, no other process inhibitions, and mixed liquor acclimation, the startup may continue as follows:

Time, Days	Site R Discharge MGD
0	0.1
30	0.2
60	0.3
90	0.5
120	0.8
150	1.0
180	1.5

Should the data support a more rapid startup, the process will be adjusted accordingly. Likewise, should it appear that there is process inhibition, particularly to the nitrification process, or that plant effluent or water quality standards might be in jeopardy, the Site R discharge may remain as is or be reduced.

I hope this addresses your concern. Please call me if you have questions.

Sincerely,

George R. Schillinger
General Manager

GRS:ld

Enclosure